DOCUMENT RESUME

ED 459 356 CE 082 742

AUTHOR Inman, Patricia; Trott, Charles E.
TITLE Pre-G.E.D. Assessment and Certification in Illinois: Final Report and Recommendations.
INSTITUTION Northern Illinois Univ., De Kalb. Center for Governmental Studies.
SPONS AGENCY Illinois State Board of Education, Springfield. Adult Education and Literacy Section.
PUB DATE 1999-10-05
NOTE 71p.
AVAILABLE FROM For full text: http://www.cgsniu.org/publications/misc/preged1099a.pdf.
PUB TYPE Reports - Evaluative (142)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Adult Basic Education; Adult Literacy; *Criterion Referenced Tests; Educational Certificates; Educational Research; Employment Potential; High School Equivalency Programs; Job Analysis; Literacy Education; Nontraditional Education; State Programs; *Student Certification; *Student Evaluation; *Test Selection; *Workplace Literacy
IDENTIFIERS General Educational Development Tests; *Illinois; Test of Adult Basic Education; *Work Keys (ACT)

ABSTRACT

Research identified a literacy assessment program applicable to the adult population functioning at pre-General Education Development (GED) test levels. An attempt to align the Test of Adult Basic Education (TABE) with the Illinois State Board of Education Learning Standards failed. ACT Work Keys emerged as the recommended and most effective assessment tool for the pre-GED population. (ACT was formerly American College Testing.) Work Keys, a criterion-referenced testing system, assessed and acknowledged learner strengths in a portfolio-type report that employers easily understood. Levels of achievement were identified, but articulation of specific skills was the strength of this program. Work Keys consisted of multiple components: assessment, job profiling, instructional support, and reporting. Service centers--six in Illinois--provided for distribution of assessment instruments and timely scoring of tests. A fundamental element was provision for an assessment of literacy skills and a developmental program for the attainment of a sustainable wage. ACT determined a literacy level using Work Keys that denoted the minimal level of competency required for functioning in the workplace. The study recommended a first level of certification for individuals who achieve this level in the core literacy areas. A second level of skill documentation could reflect the local job market. (Attachments, amounting to one-half of the report, include materials on Work Keys, such as the process, sample report, and costs.) (YLB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 459 356

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

P. Inman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Pre-G.E.D. Assessment and Certification in Illinois: Final Report and Recommendations

Report Prepared for:

Adult Education
Division of Community and Family Partnerships
Illinois State Board of Education

Report Prepared By:

Patricia Inman and Charles E. Trott
Center for Governmental Studies
Northern Illinois University

BEST COPY AVAILABLE

October 5, 1999

Center for Governmental Studies
Northern Illinois University

LE0827412

This project was funded by the Adult Education Office, Division of Community and Family Partnerships, Illinois State Board of Education and awarded to Northern Illinois University. The information gathering and analyses were conducted by staff of the Center for Governmental Studies at Northern Illinois University. All analyses and views expressed in this report are those of the authors and do not necessarily represent the views of the Illinois State Board of Education or Northern Illinois University.

Executive Summary

This report describes research conducted in search of a literacy assessment program applicable to the adult population functioning at pre-GED levels. This study was done by The Center for Governmental Studies at Northern Illinois University for the Adult Education Office of the Illinois State Board of Education [AED/ISBE]. The study and its recommendations are detailed in this report.

The study began with an effort to align the measurements of existing adult education assessments with the Illinois Learning Standards. Such an alignment proved not to be meaningful largely because the Illinois Learning Standards are based on the effects of a linear curriculum and its implementation whereas adult learning is based largely on non-normative life events as well as some curriculum effects.

Following the alignment effort, a search for an appropriate literacy assessment program was initiated and guided by criteria communicated by AED/ISBE. The assessment system should:

1) identify those competencies in individuals which might provide the basis for sustainable employment,
2) be criterion referenced,
3) be workplace oriented with progress stated in terms familiar to employers,
4) be easily monitored by agencies particularly at the local and state levels,
5) be informed by the national accountability scheme being developed to monitor and report on adult education programs nationwide, and
6) provide a benchmark for the pre-GED population and provide a basis for awarding of certificates of achievement.

Further, the researchers looked to incorporate the recently articulated requirements of accountability for adult education programs in the Workforce Investment Act. This legislation is referenced throughout this report.

The difficulty in assessing those whose literacy levels fall short of GED credentialing has been challenging for a number of reasons. These include a disproportionate number of the population reflecting a high percentage of special learning needs, physical disabilities, and little or no comprehension of English. Each of these groups needs special diagnostic assessment appropriate to their situation. These factors often result in slower rates of literacy development which makes progress difficult to measure. Persistent indications of low achievement can often discourage long-term literacy competency. A GED certificate is often not attainable or even appropriate for a population dealing with such complex learning challenges. As importantly, literacy skills crucial for employment are often invisible through the use of more traditional norm-referenced literacy assessment tools.

In the course of this project researchers reviewed relevant literature, conducted a variety of interviews, and determined if other states were looking for or had already found an appropriate solution to this inquiry. A number of adult education practitioners and administrators were interviewed in visits to several centers to learn how they currently assess the at-risk population. In the process we found a promising assessment program for Illinois to consider and uncovered a widespread practice of non-valid usage of current norm-referenced assessment tools.

Because the Test of Adult Basic Education [TABE] has been extensively used over the years in Illinois, as well as many other states, an attempt was made to align this assessment with the ISBE's Learning Standards. Two problems emerged. First, adult learners' cumulative experience does not follow a linear curriculum as is the case of K-12 students, but rather follows a pragmatic spiral in response to life needs. Therefore, a criterion referenced profile based upon the highly detailed ISBE Learning Standards became too complex and did not align. Secondly, in discussing the administration of the TABE with practitioners, it became clear that the TABE is rarely used as is required for its validity. This is discussed at length in the report.

ACT Work Keys emerged as the recommended and most effective assessment tool for the pre-GED population. Work Keys is a criterion referenced testing system that assesses learner strengths and acknowledges these strengths in a portfolio-type report easily understood by employers. Levels of achievement are identified, but the articulation of specific skills is the strength of this program. This is a system used nationally for documenting and improving workplace literacy, and is already used extensively within Illinois. Work Keys consists of multiple components: assessment, job profiling, instructional support, and reporting. Service centers, which currently number six in Illinois, provide for distribution of assessment instruments and timely scoring of tests.

Work Keys is designed to benefit individuals, businesses, educators, and policymakers to improve the overall quality of the workforce. The basic assessment instrument assesses an individual's workplace literacy in eight employability areas: reading for information, locating information, applied math, writing, listening, applied technology, observation, and teamwork. ACT has determined the three assessments that evaluate *basic* literacy as reading for information, locating information, and applied math. One of the fundamental elements of Work Keys is that it provides an assessment of literacy skills and a developmental program for the attainment of a sustainable wage rather than a minimum hourly wage.

One of the criteria this study was to address was that of providing a benchmark for the pre-GED population for the awarding of certificates of achievement as markers of progress and skill gains. ACT has determined a literacy level using Work Keys that denotes *the minimal level of competency required for functioning in the workplace.* A recommendation of this study is that a first level of certification be offered to individuals who achieve this level in the core areas of literacy [reading for information, locating information, and applied math]. This certificate would indicate to an employer that an individual has achieved a level of literacy which should allow

him/her to function in workplace settings.

A second level of skill documentation could reflect the local job market. ACT has profiled over 4,722 jobs for literacy level requirements. Various levels of competency are required for specific employment opportunities. Upon surveying local employment needs, certification for various jobs could be offered. While the first level of skill documentation would reflect general employment readiness, the second level would indicate attained competencies specific to local employment needs.

A model for Illinois adult literacy assessment has been developed within this report which incorporates both populations in personal and workplace literacy. As purposes for adult literacy achievement dictate assessment instruments, we suggest that these populations be counseled and qualified for specific adult literacy programs at the outset. This model could function effectively within current Illinois Employment Training Centers [one-stop centers] and would provide a bridge between employers and adult educational services.

Suggestions for first steps in implementing the Work Keys assessment system include a year of planning which would include a determination of central service centers, supporting curricula and materials, interagency collaboration procedures, and accountability systems. Training for those who have not used Work Keys previously would also be necessary.

A final consideration in the recommendation for the use of Work Keys as a pre-GED literacy assessment has to do with its transferability to life skill effectiveness. While providing for the development of workplace literacy, Work Keys provides a basis for assessing and developing problem-solving and decision-making skills so important in individual roles of parent, citizen, and participant in community affairs. As assessment often drives curriculum, it was considered important by the researchers to choose an assessment instrument that contributes to the education of individuals for meaningful living and not just employment.

Table of Contents

Executive Summary.. 3
Purpose of Study 8
Addressing the Assignment 10
Background Issues 11
First Step, Major Problem 13
Second Step Indicates Solution 14
Work Keys Recommended 16
- Work Keys Assessment 16
- Work Keys Job Profiling 18
- Work Keys Instructional Support 19
- Work Keys Research and Reporting 20

Achievement Certificates 21
Questions in Using Work Keys System 22
- Q1: Does Work Keys Allow for the Use of Literacy Volunteers? 22
- Q2: What About Costs? 22
- Q3: Are the Job Profiles ACT Provides Current to Today's Labor Markets? 23
- Q4: How Can Work Keys be Used with Participants Who Score in the Lowest Levels of Literacy and Have Extra Learning Needs? 23
- Q5: Are there Other Assessment Systems Used in the States? 24
- Q6: What About the Effort to Establish Accountability for Adult Education Programs From Both State and National Perspectives? 24
- Q7: How Would the Work Keys System Actually Work? 26
- Q8: Go Back to the Accountability Issue. What Performance Measures Are Possible Under the Illinois Work Keys Model? 28
- Q9: What Would Be the First Steps in Implementing the Work Keys Recommendation? 29

Concluding Comments 31

Attachments

1 Sources of Interviews 34
2 Eight Assessment Areas of Work Keys 41
3 Work Keys Job Profiles 44
4 Work Keys Job Profiling Process 46

5 Work Keys Reports 48
6 Sample Work Keys Report for a Participant 51
7 Work Keys Service Centers 58
8 Costs Associated with Work Keys 62
9 ACT's World-of-Wok Map 65
10 Arkansas' Model for Work Keys Implementation 67

Pre-GED Assessment and Certification in Illinois:

Final Report and Recommendations

Patricia Inman and Charles E. Trott[1]

Purpose of Study

The Center for Governmental Studies at Northern Illinois University was asked to find an existing literacy assessment program applicable to the adult population functioning at pre-GED levels. Overwhelmingly, this is a population for whom a General Education Degree [GED] certificate is either inappropriate or unattainable, at least in the near term.

The first effort in the study was to attempt an alignment of existing norm-referenced adult education assessments, particularly the TABE [Test of Adult Basic Education], to the Illinois Learning Standards.

A second phase of the study involved the search for and evaluation of a different literacy assessment program for possible use by the state. The search was guided by six criteria communicated by the funding agent, the Adult Education Division of the Illinois State Board of Education [AED/ISBE]. These criteria included:

1. The recommended assessment should be able to identify those competencies in individuals which might provide the basis for sustainable employment but which are invisible through the use of more traditional norm-referenced literacy assessment tools.

[1] Dr. Inman is a Research Associate with the Center of Governmental Studies and Dr. Trott is the Center's Director and a Senior Research Associate.

2. The recommended assessment should be a criterion referenced assessment system that would clearly articulate specific skills and offer developmental literacy guidance.

3. The recommended assessment should be workplace oriented with progress stated in terms familiar to employers.

4. The recommended assessment should be easily monitored by agencies involved in monitoring and evaluating adult education programs, especially at the state and local levels.

5. The recommended assessment should be informed by the national accountability scheme being developed to monitor and report on adult education programs nationwide.[2]

6. The recommended assessment should provide a benchmark for the pre-GED population and provide a basis for the awarding of certificates of achievement as markers of progress and skill gains.

These criteria obviously were drawn from perceived shortcomings of literacy assessments currently in use, the situation of the client population, and the changing context in which adult education programs are cast. Adult education programs are now considered part of the overall publicly funded workforce development programming effort, specifically included as Title II of the Workforce Development Act of 1998. As such, adult education programs are being directed to promote and emphasize literacy for the workplace, and to thereby increase the employability of the client population. Herein lies a difficulty. The work-ready certificate from most adult education programs has been the GED. Traditionally, those at lower levels of literacy, the so-called "hard-to-serve" population, are commonly assessed with norm-referenced assessment tools and make slower progress toward a perceived standard of GED attainment, thereby becoming easily discouraged as few incentives are available to encourage their progress. Norm-referenced

[2] Larry Condelli and Mark Kutner, *Developing a National Outcome Reporting System for the Adult Education Program*, Washington, D.C.: U.S. Department of Education, Office of Vocational and Adult Education, Division of Adult Education and Literacy, 1997.

tools typically define literacy within narrow limits and in terms or measurement criteria that do not communicate well with employers. Most, if not all, norm-referenced literacy tools, especially those most commonly being used, express literacy assessments in terms of deficit grade levels and such negative expressions not only discourage an adult population which has experienced little success with institutional programs or traditional literacy assessment tools, but also provide little guidance for future self-directed instruction or occupational or career planning.

Too often being labeled deficient in "grade level literacy" connotes illiteracy and illiteracy seems to communicate incompetence. However,

> Illiteracy does not equate with incompetency. Educational policy can reflect an understanding that people who are regarded as illiterate have real strengths which may readily be built upon, or it can use a deficit model which stresses weaknesses and, by implication, the incompetence of individuals. The question is then, as before, will people better relate to an approach which recognizes strengths or weaknesses? If adult education policies promote a view of illiteracy which is unremittingly negative, then many [people] may not see themselves reflected in the programs such policies foster and support.[3]

Thus, we are looking for an assessment tool which offers positive encouragement to the at-risk population, provides guidance for literacy development, enables a means to award certificates of achievement, communicates well with employers, can be implemented and monitored on a statewide basis, and provides a basis to measure the progress achievements of funded programs.

Addressing the Assignment

To address the assignment of finding and assaying alternative assessment tools, and recommending an adult education assessment scheme for Illinois, we discerned the need to review the relevant literature, conduct a variety of interviews, and determine if other states were looking for or had already found a solution to this inquiry. We sought to interview a number of adult education practitioners and administrators, and visit several centers to learn how they

---

[3] Charles Craig, Whose Literacy? *Concepts of Literacy and Illiteracy in Adulthood and Their Relationship to the Contextual Imperative*, DeKalb, IL: Northern Illinois University, Doctoral Dissertation, 194, p. xx.

currently assess the at-risk population. In the process, we found a new and promising assessment program for the State to consider.

Background Issues

The difficulty in assessing those whose literacy levels fall short of GED credentialing has been especially challenging due to a number of factors. These include a disproportionate number of the population having special learning needs, physical disabilities, and little or no comprehension of English.[4] Each of these groups needs special diagnostic assessment appropriate to their situation. Further, the preceding factors often result in slower rates of literacy development. Progress in a protracted process is often difficult to capture or measure, which gives rise to a practice of frequent and repeated testing. But, persistent indications from test results of slow achievement can often serve to discourage long-term achievement. A GED certificate often is not attainable or even appropriate for this population which is dealing with complex learning challenges.

Literacy is difficult to define and reasons for seeking literacy education differ. This is particularly true for the adult population. Seeking advanced levels of literacy to help children with their studies, attainment of a GED to provide for a model for children, literacy for employment, retention of a job, or promotion in an existing position are all voiced as reasons for improving reading and math skills. Assessment should be based on instructional intent. That is, there is no one assessment for an adult population with such diverse reasons for study.

There also is discrepancy regarding the appropriate goals of adult literacy between those found articulated in funded programs and those voiced by adult learners. The federal government defines goals in terms of skills which principally initiate work or promote workplace learning.[5] For example, the goals of adult education as described in the Adult Education and Family Literacy Act of 1998 include:

---

[4] About 12 percent of Illinois residents say they have a disability or condition that keeps them from participating fully in everyday activities. This contrasts with 28 - 31 percent of adults who performed in the lowest level on each literacy scale of the *State Adult Literacy Survey*. Lynn B. Jenkins and Irwin S. Kirsch, *Adult Literacy in Illinois: Results of the State Adult Literacy Survey*, Princeton, NJ: Educational Testing Services, 1994.

[5] National Reporting System for Adult Education, *Measure Definitions for the National Reporting System for Adult Education*, Washington, D.C.: U.S. Department of Education, 1998.

- assisting adults to become literate and obtain the knowledge and skills necessary for employment and self-sufficiency;
- assisting parents to obtain the necessary skills to become full partners in their children's educational development; and
- assisting adults in completion of secondary education.[6]

Self-reported goals expressed by adult learners, on the other hand, include:

- to have access to information and orient themselves in the world;
- to give voice to their ideas and opinions and to have confidence that their voice will be heard and taken into account;
- to solve problems and make decisions on their own, acting independently as a parent, citizen, and worker, for the good of their families, their communities, and their nation; and
- to be able to keep on learning in order to keep up with a rapidly changing world.[7]

These goals appear much broader in scope than those outlined by the federal agency. The expressed needs, however, can be met through a workplace literacy program which helps meet physical needs while providing access to information in a literary form. This sentiment was evident at a recent literacy conference by a woman attending whose illiteracy had been a barrier to work. She felt her physical needs had been met through employment; empowerment and voice in other areas soon followed. Her employment and earning power with contributions through taxes legitimized her empowerment and expressing of her opinions publicly.[8] Literacy for the workplace, citizenry, community, and family must be reconciled in both assessment and instruction. As assessment often drives curriculum, we must be sure that literacy assessment relates to those skills that are transferable to these various life roles.

Non-compulsory status for most adult learners makes attendance often sporadic. Physical barriers such as lack of transportation, child care, housing, and diverse work hours present unique barriers

---

[6] Public Law 105-220, August 7, 1998. Title II is known as the Adult Education and Family Literacy Act.

[7] *Equipped for the Future*, Washington, D.C.: National Institute for Literacy, 1995.

[8] Vice President Al Gore's Summit on 21st Century Jobs, Video Conference, January 12, 1999.

and educational challenges for the adult learner and typically result in slower educational growth. Time constraints must be considered in both the assessment process and follow-up developmental instruction.

First Step, Major Problem

During the course of the study, we spoke with practitioners and administrators of adult education programs, visited various adult education centers in Illinois, studied both national and state demographics regarding adult literacy, considered numerous assessment programs being used in other states [Arkansas, Colorado, Louisiana, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, and Texas], studied current literature regarding the assessment of adult literacy, and spoke with sales representatives of various testing programs.[9]

Because the Test of Adult Basic Education [TABE] has been used extensively over the years in Illinois, as well as many other states, we originally began by trying to align this assessment tool with the Illinois State Board of Education's [ISBE] Learning Standards. Two problems emerged in the course of this tack. First, adult learners' cumulative experience does not follow a linear curriculum and progression of outcomes as is the case of K-12 students. Adult intellectual and cognitive growth centers on the accumulation of experience in dealing with concrete problems adults encounter in multilayered and complex patterns. "There is growing recognition within psychology that [adult] development needs to be understood, not only in terms of normative age-graded stages, but also in terms of nonnormative life events."[10] Therefore, a criterion referenced profile based upon the highly detailed ISBE Learning Standards became too complex and did not align. Further, even a simplified profile provided no information regarding the student's literacy ability in work-related terms. The TABE expresses literacy in terms of grade levels, reflecting the linear progressive curriculum and learning of schools, rather than workplace related skill competencies.

Second, in discussing the administration of the TABE with practitioners and administrators, it became clear that the TABE is rarely used as is required for its validity. McGraw/Hill, the

---

[9] See Attachment 1 for a listing of interviewees and state contacts.

[10] Mark Tennar and Philip Pogson, *Learning and Change in the Adult Years*, San Francisco: Jossey-Bass Publishers, 1995, p. 97.

publisher of the TABE, provides five levels of its test. Depending upon the adult learner's literacy at the time of assessment, the student should take Level L-Literacy [literacy level of grades 0-1.9], Level E-Easy [literacy level of grades 1.6-3.9], Level M-Medium [literacy level of grades 3.6-6.9], Level D-Difficult [literacy level of grades 6.6-8.9], or Level A-Advanced [literacy level of grades 8.6-14.9]. The publisher also provides a locator test to assist with the assessment placement. But, according to practitioners in Illinois and Arkansas, the locator test is rarely used. Rather, Level D is administered, largely because it is more convenient and less costly to order and administer one form of the TABE.[11] Additionally, the TABE D closely approximates an adult literacy and so it is reasoned that the assessment endeavors to measure how far below an adult level of literacy the participant is. Also, many adult education practitioners simply are unfamiliar with the TABE Locator.

As a result, many of the assessments of adult learners using the TABE Level D simply are not valid. Not only are the results inaccurate [actual literacy level tends to be over-stated] and the resultant data to support further testing contaminated, the developmental path for the learner may be inappropriately defined, the learner and employers may be misled as to actual achievement, and programs may be misreporting the fruits of their efforts. That such misuse of the assessment is an issue was confirmed in interviews with practitioners, administrators, and even the McGraw/Hill sales representative. The two factors consistently mentioned in interviews for this practice were that the adult educators are familiar with the level D test and that more individualized assessments [using the other tests as needed] would significantly increase testing costs over the practice of quantity purchasing of the Level D test. The trade-off here is between appropriate diagnostic information for properly counseling people in need of assistance and operating costs plus staff training. Given prevailing practice, it is clear that assessment information is being mis-represented and knowingly overstated or invalid.

Second Step Indicates Solution

The search for a better assessment tool to provide common ground for employers, educators, and adult learners continued. During several interviews and upon further investigation, we pursued ACT's [formerly American College Testing] Work Keys program. Various programs using Work

[11] In Illinois, the Slossen Oral Reading Test [SORT-R] is sometimes used as a quick placement test. The Slossen, however, is not aligned with the TABE in any way, but it is used for its convenience and low cost.

Keys were identified with assistance from ACT personnel and this group was narrowed to those using Work Keys with "hard-to-serve" populations similar to those being emphasized in this study.

To assist us in coming to grips with future issues to be addressed in adult education, we attended a live video conference on lifelong learning presented by Vice President Gore. Discussion topics included:

- Which adults have the greatest learning needs in the U.S.?
- How can we achieve the potential of the Workforce Investment Act?
- How can we create new employer-employee relationships for workforce training?
- What are the small business challenges in creating a skilled workforce?
- What are the 21st Century challenges for workplace-based training?
- What are workplace skills as defined by the new economy?
- How can we use technology to advance literacy and workplace skills?
- What are the new roles for community colleges and career schools in workforce development?
- How can we help laid-off workers gain new skills for better jobs?

We have incorporated these discussions into our recommendations.

We also ordered and viewed a detailed training program presented by the Public Broadcasting Service on "Literacy and Learning Disabilities." This highly informative program included discussion on:

- Proper diagnosis of learning disabilities;
- Learning processes;
- Teaching strategies for adults with learning disabilities;
- Application of principles in adult learning classrooms;
- Practical accommodations;
- Formal evaluations for adults with learning disabilities;
- Testing accommodations;
- Job entry skills; and
- School-to-job transition plans, including workplace accommodation.

These discussions also helped frame the recommendations presented below.

Finally, information from various internet searches, particularly from the Literacy Information and Communication System [LINCS], an offering of the National Institute for Literacy, provided valuable background and contacts.

Work Keys Recommended

ACT Work Keys emerged as the most effective assessment tool for the pre-GED population. *Work Keys is a criterion referenced test that assesses learner strengths and acknowledges these strengths in a portfolio-type report found easily understood by employers.*

Initially, we looked at the various goals of adult education and looked to instruments which would effectively evaluate progress in those areas [see Figure 1]. We also considered appropriate certification levels. While the TABE and the GED, which are currently being used by most of the Adult Basic Education and Adult Secondary Education programs in the state, are often appropriate for clients interested in family literacy and personal literacy, these tests provide little information for potential employees and employers interested in workplace literacy. Further, they provide little developmental information for the adult, pre-GED learner interested in vocational counseling and developmental activities. Work Keys, on the other hand, seems to meet all of these objections.

Developed by ACT, Work Keys is a national system for documenting and improving workplace skills. It consists of multiple components: assessment, job profiling, instructional support, and reporting. It is designed to benefit individuals, businesses, educators, and policymakers to improve the overall quality of the workforce.

Work Keys Assessment. ACT Work Keys assesses an individual's workplace literacy in eight employability skill areas:[12]

1. Reading for information;
2. Locating information;

[12] See Attachment 2 for descriptions of each employability skill area.

Figure 1.
Proposed Testing Strategies

Assessed Literacy Level [Grade Level Equivalents]	Literacy Goal		
	Family & Personal	Work Related	ESL
0 - 6	CASAS; Appropriate Diagnostic Tests; Work Keys; TABE	CASAS; Appropriate Diagnostic Tests Work Keys: Reading for Info. Test, Score=Level 3	Not Addressed
6 - 8	Work Keys; TABE	Work Keys: □ Reading for Info. Test* □ Applied Math. Test* □ Locating Info. Test* * Certificates can be awarded	Not Addressed
Secondary	GED; Work Keys	Work Keys: Certificates based on locally reflected employment needs	Not Addressed
Post-Secondary	Work Keys	Work Keys or referral to other programs	Not Addressed

ABE Adult Basic Education
ASE Adult Secondary Education
ESL English as a Second Language
CASAS Comprehensive Adult Student Assessment System Applied technology;

3. Applied math;
4. Writing;
5. Listening;
6. Applied technology;
7. Observation; and
8. Teamwork.

A person's abilities are measured in each of these eight areas according to a set of skill scales. Eight skill scales are used, but these are not to be confused with grade levels. Rather, the scales reference competencies of increasing complexity. Each employability skill area uses a testing format and a person's score on a test indicates their skill level in the employability area tested. For example, an individual may be at a skill level 3 in Reading for Information and a skill level 5 in Applied Math.

Institutions using the Work Keys system have found that three assessments define what are commonly thought of as basic literacy skills. These are Reading for Information, Locating Information, and Applied Math. The other five assessment areas are considered supplemental and are used depending upon the job profiles being considered by the individual participant.

Work Keys Job Profiling. One of the strengths of the Work Keys system is that its employability skill areas are linked to job profiles. ACT authorized job profilers have described the specific skills needed for over 4,722 jobs. Job profiling, a job analysis methodology, selects the tasks most important to the jobs and identifies the skills and skill levels required for successful performance of that job.[13] Developmental programs can then focus on instruction necessary to enhance the individual's skills for their desired job or position, or direct them to jobs and opportunities more readily aligned to their existing skills. The occupation profiles done by ACT currently are adequate to provide career guidance for ABE clients.

However, job profiling can be tailored to the local labor market as well. New jobs, changes in jobs or the need to validate a job profile in a local labor market has not only been anticipated by ACT Work Keys, but is encouraged. Though a time-consuming process, ACT has devised a

[13] See Attachment 3 for details.

seven step job profiling process which is available for local centers to use. Training for those who would do the job profiling is necessary and is available from ACT.[14]

Work Keys Instructional Support. This third component of Work Keys provides suggested developmental instruction for each employability skill area and level. Corresponding to each of the Work Keys assessment is a *Targets for Instruction* guide. Each *Target* contains a detailed description of each skill level, strategies for developing instruction in the skill areas, sample assessment items, and suggestions for materials and activities that are useful for teaching workplace literacy skills. These *Targets* are designed as springboards for building curricula and instructional materials tailored to the specific needs of learners. This design also maximizes flexibility for the development of instructional materials suitable for use in a variety of settings and for learners with a wide range of life experiences and goals.

Schools and other training institutions can use these *Targets* to supplement or reinforce existing curricula, thus connecting instruction more directly to the demands of the workplace. Employers also can use these instructional support guides to help implement training programs to upgrade employee skill where needed.[15]

Importantly, a number of commercial vendors have developed software and other materials aligned to the Work Keys system. Practitioners report being especially impressed by the WIN program [Worldwide Interactive Networking] for self-study courses, particularly at the lower levels of employability skills.[16] WIN will be discussed later in this report. However, it is worthy of note that the WIN developers also have developed a program entitled *Virtual Onestop,* which provides individualized career counseling.[17]

---

[14] See Attachment 4.

[15] It should be noted that in discussions with practitioners, this *Targets* support system was found to be helpful, but did not allow individuals to be self-directed. Instructional direction still is needed to attain goals.

[16] Worldwide Interactive Network, 1000 Brentwood Way, Kingston, TN 37763.

[17] Ibid.

PLATO is a computer-based instructional system designed to support Work Keys, consisting of modules supporting each Work Keys employability skill area and level.[18] PLATO has specifically aligned modules to support instruction in the three basic areas of literacy [reading for information, locating information, and applied math]. Work Keys also offers a supplementary "Locator", which provides a starting point for individuals without having to go through a full assessment. This Locator is built into the PLATO system. Also offered is "Pathways", a PLATO program to manage all resources used with the Work Keys system. The latter has been adopted for use in Arkansas, where Work Keys is being implemented statewide.

Work Keys Research and Reporting. In this fourth system component, Work Keys offers data base compiled references for jobs and occupations, individual and aggregate reports of assessment data, and consulting services. The reports provide individuals, adult educators, and employers with the information needed to make career choices, plan and evaluate training efforts, and identify qualified employees.[19]

Particularly effective is the individual report each participant receives following an assessment. *This portfolio-style report expresses competencies in terms of what a person **can** do.*[20] The report could be taken to a job interview as a description of achieved literacy expressed in employability skills familiar to the employer. Further, the individual report suggests direction for future instruction.

Turnaround time for assessment reports varies according to whether or not the assessment is administered at a "service center". A service center can provide immediate feedback through the use of a NCS or scantron scanner.[21] Otherwise, if assessments are sent away to either Iowa City or another service center, the results may take two weeks to be returned. This time lag could be a problem for adult learners who have transportation problems or conflicting work schedules.

---

[18] TRO Learning, Inc., 4660 W. 77th St., Edina, MN 55435.

[19] See Attachment 5 for an overview of reporting options.

[20] See Attachment 6 for an example report.

[21] See Attachment 7 for an overview of the service center program.

Fortunately, there already are six [6] service centers in Illinois, so turnaround time should be minimal.[22]

Work Keys is a program with a number of building blocks and can be used with or without all of the components.

Achievement Certificates

One of the criteria this study was to address in determining a recommended assessment program was that of having a benchmark for the pre-GED population to enable the awarding of certificates of achievement as markers of progress and skill gains. Work Keys distinctly provides a framework for such documentation of skills and progress. ACT finds that a level three [3] skill level, as assessed by Work Keys, is the minimal level of competency required for functioning in the workplace.[23] It would seem appropriate to offer a first level of certification [or skill documentation] to individuals who attain level three competency in the core areas of literacy [reading for information, locating information, and applied math]. This certificate would indicate to an employer that an individual has a level of literacy which should allow him/her to be successful in appropriate workplace settings.

A second level of skill documentation could reflect the local job market. Upon surveying local employment needs, certification for various jobs could be offered. While the first level of skill documentation would reflect general employment readiness, the second level would indicate attained competencies specific to local employment needs.

This process of skill documentation also would meet the State's need for monitoring or maintaining accountability of the local adult education programs. Performance measures based on achieving either or both levels of skill credentials could easily be derived.

---

[22] Danville Area College, John A. Logan Community College, Rend Lake College, Richland Community College, South Suburban Community College, and Waubonsee Community College. In addition, there are 13 other principal using sites [community colleges and high schools] in Illinois.

[23] "Extending the Ladder: From CASAS to Work Keys," Comprehensive Adult Student Assessment System, San Diego, CA and Iowa City, IA.

Questions in Using the Work Keys System

Question 1. Does Work Keys allow for the use of literacy volunteers? In discussions with practitioners already using the Work Keys program, it was suggested that Illinois literacy volunteers could easily support the Work Keys system in assessment implementation and in providing feedback when reports are returned to participants. Instructions for each procedure are clear and simple, and self-direction is built into the Work Keys system so that less instructor support is needed for remediation. And, trained literacy volunteers can continue as tutors and help assess individuals participating in the personal literacy program.

Question 2. What about costs? Costs are always a key consideration of a program. There are a number of ways to implement Work Keys and costs will vary with the implementation design selected as well as the tests administered. Arkansas, for example, has just completed its first year in a statewide adoption for a "hard-to-serve" population similar to that in Illinois. In its first year, Arkansas' programs administered tests but functioned without service centers, thereby increasing turnaround time while holding down costs. In its second year, Arkansas is funding service centers [increasing implementation costs] so learners can be provided with near immediate results.

Illinois already has six operating Work Keys service centers. More would be recommended for full state implementation of the Work Keys system. Each service center requires a first year investment of $4,000 and yearly maintenance fees of $2,500.

Another part of the implementation design or structure is whether to provide job profiling services. Obviously, a cost is involved as personnel have to be trained to implement the Work Keys' designed job profiling process. But this service has been found to be a highly effective means to identify local employment needs and define them in terms that equate with the literacy program [using Work Keys]. Further, job profiling is proving to be an income source for programs as employers desiring to have their jobs profiled and described in the employability skills required will pay for the process to be completed.

A related cost issue is that costs vary by type of program, that is rural versus urban. Some costs can be higher in urban programs and others higher in rural programs. If the intent is for testing fees and charges for services such as job profiling to be the same statewide, then cross subsidies

will exist and some programs may resent the practice. This latter issue has emerged in Tennessee where Work Keys is being implemented through all the community colleges in the state.

Service center and testing costs are detailed in Attachment 8.

Question 3. Are the job profiles ACT provides current to today's labor markets? For descriptive purposes, the jobs profiled by ACT have been grouped into six categories.[24] The original studies for the categories were done in 1969 and revised in 1985. A more current study would possibly be helpful to confirm the currency of the categories. At the same time, the job profiles reflect today's workplace. Profiling of emerging jobs can be an incentive to mount a local job profiling effort, thereby providing a revenue stream for the adult education programs.

Question 4. How can Work Keys be used with participants who score in the lowest levels of literacy and have extra learning needs? Illinois has a large English as a Second Language [ESL] population, which is not addressed in this study. As was referenced earlier, Illinois residents who performed in the lowest literacy level in the State Adult Literacy Survey had disproportionate numbers of individuals with special learning needs such as learning disabilities, visual, or hearing difficulties. These conditions need further diagnostic testing if they are to be adequately serviced.

In an effort to avoid unnecessary testing, we suggest that the Work Keys "Reading for Information" test can be used as a marker or locator test. If individuals do not score at the minimal level of literacy for employability, that is Level 3 skill level, then they should move to other diagnostic testing to determine such factors as levels of English speaking skills or the need for further learning assessments [for learning disabilities or physical disabilities having affected test scores]. To avoid programming inappropriate instruction for an individual, proper assessment of current skill level and learning difficulties, if any, are critically important.

If all that is needed is literacy remediation, the individual can take the Comprehensive Adult Student Assessment System [CASAS] which extends assessment to lower levels of literacy. Participants can then work in a developmental instructional program such as WIN [a workbook-

[24] See Attachment 9 for details of the job profiling descriptions.

based program] or PLATO [a computer-based, self-directed program] , both of which are aligned to Work Keys.[25]

Question 5. Are there other assessment systems used in the states? We have already mentioned the TABE, which is a norm-referenced test being used extensively among the states. The fact that it is anchored in grade-level equivalents, and normed accordingly, is limiting to its use in the workplace and for adult learners. Also a problem is that the mis-use of the TABE is widespread, meaning that it is frequently administered at a level inappropriate to the individual being assessed, resulting in invalid [particularly inflated] scores. This makes minimal literacy assessment especially difficult and leads to the misleading of individuals and employers alike.

One of the arguments in favor of using the TABE has been its low cost and easy administration. If this instrument is to be administered appropriately, as was mentioned earlier, retraining of administrators and practitioners is vital. Costs will also increase as locator tests will need to be purchased as well as the appropriate scoring materials. Scoring costs are not included in the cost of an individual TABE and such costs become considerably greater with the use of multiple forms and various scoring materials. The increased time spent by instructors in scoring these assessments also is a consideration. On the benefit side of these increases in cost would be valid assessment information.

The Saville and Holdsworth [SHL] Workforce and Economic Development Assessment also is a norm-referenced test with sub-tests aligned with different workforce skills. The test is being used in South Carolina and Indiana, but the instrument was normed in the United Kingdom and is not extensively used in the United States. We could not find supplemental materials being developed by commercial vendors to support instruction. Also, assessment results report for the SHL provide little information for the employer.

Question 6. What about the effort to establish accountability for adult education programs from both state and national perspectives? Section 212 of Title II of the Workforce Investment Act of

[25] According to practitioners who have used both programs, PLATO has a broader applicability, but is not as effective an instructional guide for Work Keys. Tom Applegate, the Executive Dean of Workforce Education for Austin Community College in Austin, TX, suggests that both programs be used. Dr. Applegate piloted Work Keys in Ohio before moving to his current post where he is now working with Work Keys.

1998 describes accountability requirements for adult education and literacy activities funded under the Act. Accountability is defined as assessing the effectiveness of eligible agencies in achieving continuous improvement of adult education and family literacy activities so as to optimize the return on investment of the federal funds so used. Core indicators of performance to indicate effectiveness are to include:

- demonstrated improvements in literacy skill levels in reading, writing, and speaking the English language, numeracy, problem solving, English language acquisition, and other literacy skills;
- placement in, retention in, or completion of post secondary education, training, unsubsidized employment, or career development; and
- receipt of a secondary school diploma or its equivalent.

States may add other measures to this core set. We would offer that the State consider a measure based on the awarding of "literacy skill certificates". These have been discussed earlier and include a certificate indicating achievement of a base literacy level necessary for workplace performance [attaining a Work Keys skill level 3 in Reading for Information, Locating Information, and Applied Math] and a certificate for achieving the literacy levels required for specific jobs in the local employment market.

While the above indicators have yet to be given final definition, it is safe to assume that the first indicator will involve literacy assessment results like those being discussed here. As is being recommended, Work Keys is very consistent with documenting skill levels, especially in terms related to the workplace. Work Keys can be used to define those who have employability skills sufficient for entry into the workplace, identify those individuals whose literacy needs remediation to bring them to the entry level of skill, and, when used in conjunction with local job profiling or the job profiles available through ACT, offer a means to monitor and document attainment of skill levels for particular jobs and careers. A word of caution is in order. Placement into employment does not equate to retention in a job. The pressure to move individuals off of welfare roles and into employment can easily result in inappropriate placements of people having low literacy levels. Duration of and advancement in employment probably are more appropriate indicators of effective literacy development.

As importantly, Work Keys is being used in all but three states. Articulation of data on a national level is possible.

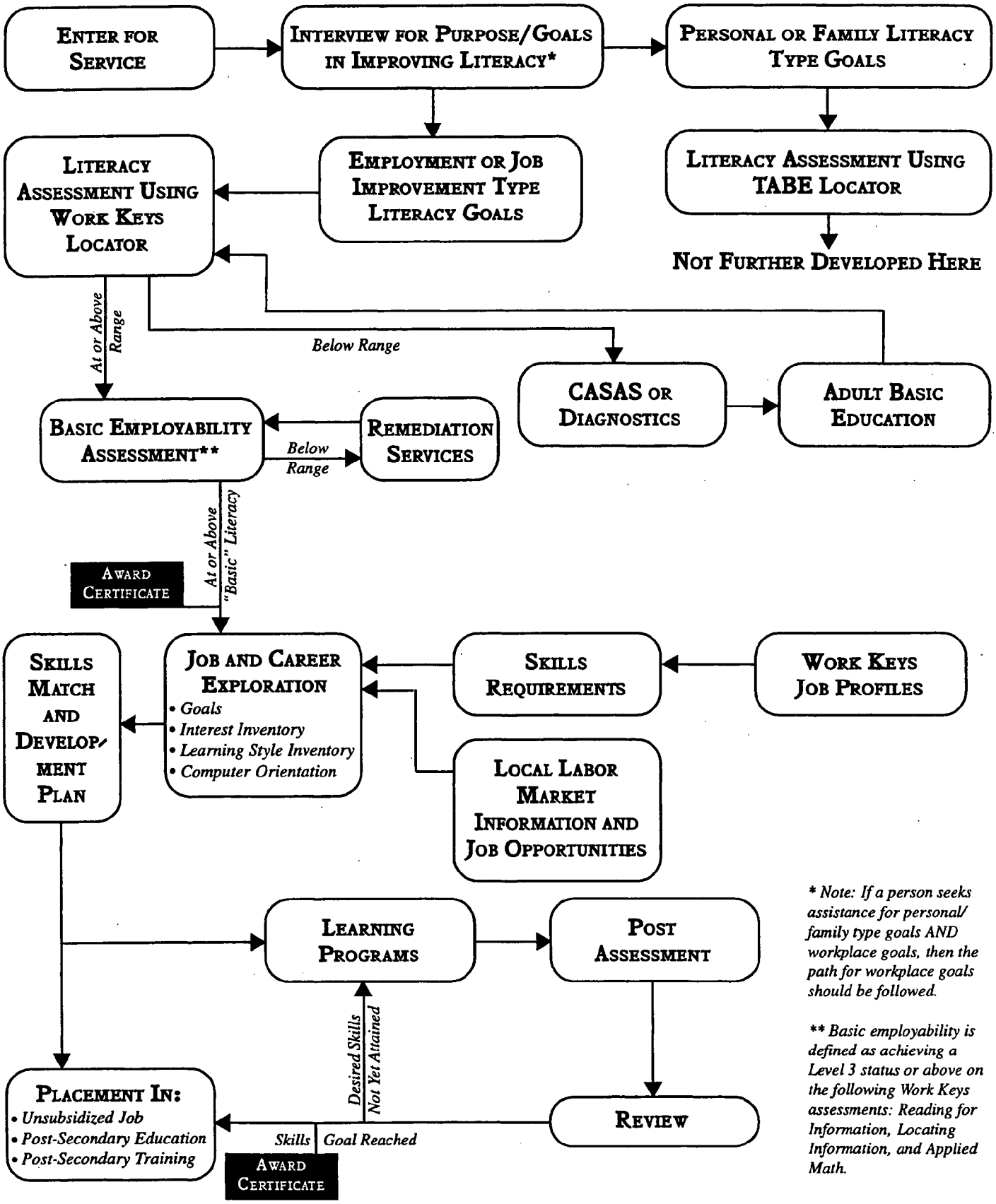
Question 7. How would the Work Keys system actually work? Work Keys has been implemented predominantly with high school students and within corporate settings. However, Arkansas has developed a model that has been put in place over the past year in the state's adult education and business outreach programs. It is being looked to by other states as an effective scheme using Work Keys. Our discussion here draws heavily upon the Arkansas experience.

We propose an Illinois model as portrayed in Figure 2. Essentially described as a "client flow model", a key element, and one distinguishing it from the Arkansas approach, is the initial determination of why the client is seeking literacy services. As was stated earlier, assessment should be based on instructional intent. We propose that the client be given a TABE locator assessment as the prelude to determine a development plan *if* the client's goal is to improve their literacy to achieve personal or family goals. However, if the client's objectives are workplace related, that is securing a job or improving their job situation, then we propose that the Work Keys Locator be used prior to formal assessment of current literacy skills. In either case, the locator is being used to discern the appropriate literacy assessment to be administered and thereby gain assessment results with high predictive validity.

The Work Keys Locator will indicate whether the participant is likely to be at or above the basic literacy level, that is, Work Keys Level 3. If the indicator is at Levels 1 or 2, referral would be made for diagnostic services to determine whether learning disabilities are present. For those with a Work Keys Locator indicating Level 3 or above, the next step would be a literacy assessment using the basic literacy package suggested above [Reading for Information, Locating Information, and Applied Math]. If the client scores at the Work Keys literacy levels 1 or 2, then some remediation is in order and programming can be set accordingly.

If the client scores at or above level 3, meaning that employability skills for entrance into the labor market have been achieved, a certificate of achievement would be awarded and a career exploration/planning session would be scheduled. In the latter, interest inventories could be used as well as local labor market data and job profiles in an effort to assist the participant identify job and career opportunities and the associated skill requirements. This can lead to programming for training and learning to develop the skills for the identified jobs and opportunities. Targets for Instruction [the ACT teacher/trainer instructional guides for skill development], the WIN program [developed by an independent vendor and provides curricular guidance in literacy

Illinois Model for Implementing Work Keys



* *Note: If a person seeks assistance for personal/ family type goals AND workplace goals, then the path for workplace goals should be followed.*

** *Basic employability is defined as achieving a Level 3 status or above on the following Work Keys assessments: Reading for Information, Locating Information, and Applied Math.*

remediation programs at the lower levels], PLATO modules [those aligned to the basic Work Keys assessment as well as other related supplemental programs], and individual instruction are all possible supports to increased workplace literacy. This variety of materials allows for self-directed activities as well as instructor-led programs.[26]

When the literacy skills needed for the participant selected jobs are achieved, a second skill certificate can be awarded.

Question 8. Go back to the accountability issue. What performance measures are possible under this Illinois Work Keys model? While specific federal measures are not yet available, we can demonstrate measures and measurement issues. First, the entrance interview would define two "populations" for measurement, those going into workplace literacy and those going into personal and family literacy. Our comments follow the former population or denominator for measures.

In reporting data for Work Keys, it must be acknowledged that it often takes more time to move up a skill level in Work Keys than it does to advance a year in reading achievement score based on the TABE. Each level of Work Keys involves achieving a greater variety of skills than the achievement of a linear grade score. For this reason, it was suggested that the program be open-start, open-end to allow for the greater time variability in skill level achievement. However, this provides a challenge for data capture. If no one measure provides appropriate assessment for the entire adult learning community, we must first differentiate motives for literacy instruction and consider two separate groups for measurement purposes.

A core indicator concerns demonstrated improvements in literacy skill levels. Of those entering for workplace literacy, measure the percentage receiving the first skills certificate. This certificate means they have met the basic employability literacy skills involving both reading and numeracy.

Another core indicator concerns placement in post secondary education, unsubsidized employment, or career development. Clearly all three of these placements are countable from the

[26] ACT makes available a list of curriculum vendors that have aligned instructional materials to the Work Keys system. While ACT does not endorse any particular vendor, the list currently includes 35 vendors and is available upon request.

model described in Figure 2. The percentage here can be based on all those in the workplace literacy track or on those who have achieved their basic employability skills certificate. Career development placement may be those who seek skills training specific to local career and employment opportunities, with a "counter" when the second skills certificate is awarded. The latter will depend upon how career development is defined for measurement purposes in the federal regulations.

The third core indicator concerns placement in secondary school completion or the GED completion. This, too, is countable in the Illinois model. The issue will be the population base for converting the count into a rate or percentage.

In their report, *Developing a National Outcome Reporting System for the Adult Education Program*, Condelli and Kutner[27] suggest four adult literacy levels expressed in grade equivalents and CASAS scores [Comprehensive Adult Student Assessment System]. By analyzing data from reading and mathematics assessments, CASAS and ACT researchers have been able to provide linkages between their two systems. This alignment could possibly be used to put adult learners' achievement into some form of national data collection.

Question 9. What would be the first steps in implementing the Work Keys recommendation? As Work Keys is already an established assessment system in Illinois, being used in several adult education centers, and business outreach centers in at least 11 community colleges, we do not feel that it is necessary to pilot the program. This does not mean that the State is ready to totally implement Work Keys in a first year.

We propose a planning year followed by a scheduled implementation/conversion program with a goal of being fully implemented by the end of the second year following the planning year. During the planning year, many questions need to be addressed and training in Work Keys needs to occur, as does training in the use of the TABE Locator. Among the key planning issues are the following:

---

[27] Larry Condelli and Mark Kutner, *Developing a National Outcome Reporting System for the Adult Education Program*, Washington, D.C.: Pelavin Research Institute, March 1997.

- Planning for Service Centers:
  - How many are needed to provide the turnaround service desired?
  - Where will the service centers and satellites be located?
  - How will the service center start-up costs be funded?
  - How will the annual maintenance costs be funded?
  - Will service centers be encouraged or required to do job profiling?
- Interagency collaboration:
  - Will all agencies involved in a one-stop use the same literacy screening assessment?
  - Will the one-stop intake program use the Locator while the adult education program would do the fuller literacy assessment? If yes, how would the funding scheme work?
  - How can duplication of client counts be avoided among the various agencies? The counseling session up-front in the proposed assessment process might provide for an assignment of greatest contact for purposes of data capture.
  - Will the adult education personnel do the employment and career counseling for participants in need of literacy assistance or will this counseling service be external to adult education?
- Supporting curricula and materials:
  - Should all adult education programs use the same supporting training materials, whether WIN, PLATO, or ACT materials, or others?
  - If several or all programs use the same materials, will there be an effort to coordinate purchasing?
  - Can all programs accommodate computer assisted learning as required for use of PLATO?
  - What type of in-service programs will be planned regardless of whether the different programs coordinate their use of curricula and materials?
- Setting up an accountability system:
  - Specifically, what performance measures will be used?
  - Will the State require any measures besides the federal core measures?
  - Will the State support and issue the Employability Skills Certificate, as proposed, or will this be a local choice?

- What data elements will need to be reported on each participant to assure a measurement system?
- How will performance expectations on core measures and State measures, if any, be determined?
- How will the need for corrective action be addressed when adult education programs fail to meet performance expectations?
- What will be reported through the Illinois Common Performance Management System regarding improvement in adult education?

To assist with the development of effective programs throughout the state, we suggest that AED/ISBE undertake an effort to document the processes and progress at the existing six Work Keys service centers in Illinois. The compilation should provide models to follow in a larger statewide initiative.

Concluding Comments

The recommendation regarding Work Keys is based first on aligning assessment more closely to the workplace. With the focus shifting from general literacy to workplace literacy, as evidenced by the inclusion of the adult education and literacy programming under the Workforce Investment Act of 1998, it would be a strategic move for adult education to adopt an assessment system that communicates equally well with participants, employers, and educators. This change in focus brings pressure to the field of adult education to change its prevailing assessment practices. Up to this point, employers have had few markers of employee literacy as it relates to specific jobs, classes of jobs, and careers. The primary benchmark has been the attainment of a high school diploma or a GED. While these provide some indication or expectation as to level of literacy and a certain indication of perseverance, they do not assure alignment of literacy skills to the workplace context. Nor do they apply to individuals at pre-GED levels who nonetheless have demonstrable skills sufficient for employment. Work Keys is aligned to workplace literacy skills and reports on literacy skills which evidence employability.

Further, as part of the movement to quality assurance systems, employers increasingly are asking for the documentation of employee skills. For the employer, *meaningful* certificates of achievement must include information that is relevant to specific skills and/or classes of jobs. For

the individual, such meaningful certificates of achievement will help secure jobs, assist in accessing opportunities for advancement, and augur self esteem. An assessment of workplace literacy must provide for individual development, but it also must be accountable to employers in terms related to the workplace.

Adult education also must redefine its role in relation to the multiple agencies providing development services for participants seeking to gain entry to the workplace or to secure better employment futures than they now perceive they have. Functioning in this environment will require a heightened degree of coordination and collaboration between agencies involved with workforce development. This will mean that the role of adult education in assisting adults needing services to gain entry or opportunities for advancement in the workplace will likely undergo scrutiny and clarification vis-a-vis other workforce development programs and agencies. Nowhere will this be more critical than in the use of information, especially regarding the participants involved. A critical base of information on participants in the workforce development system will be their literacy assessment, the traditional arena of adult education. We suggest that the assessment needs to communicate attained skills or competencies, telling all involved parties what is possible, rather than spinning on negative deficits. Individualized training plans need to be based upon a documentation of attained skills and continue to build such documentation for the individual, the different workforce training programs, and ultimately for the employer. The key here is an assessment system that positively documents skills in workplace relevant terms and provides a common ground for discussion, planning, and employment. Work Keys does exactly this!

Work Keys is a literacy assessment system that:

- reflects the strengths of individuals rather than their deficits;
- is a criterion referenced testing system describing attainment of specific skills;
- assesses literacy in terms of competencies demanded in the workplace;
- provides assessment results easily understood by employers;
- provides a basis for developing measures consistent with new accountability requirements for adult education programming;
- provides for skill documentation at two pre-GED levels as well as continuing to encourage eventual GED attainment;
- is supported by developmental materials from independent vendors; and

- when used with CASAS, provides literacy assessment appropriate for both pre-employment as well as higher levels of literacy.

Comparing this list to the criteria articulated for the search for a different assessment system than currently in use in Illinois will reveal that Work Keys satisfies the sought after features and capabilities.

Finally, Work Keys, while providing for an optimal transference of skills for employability, does not eschew other areas of literacy education. Work Keys is also a basis for assessing problem solving and decision making skills so important in individual roles of parent, citizen, and participant in community affairs. This said, one has to consider carefully the traditional role of adult education and be wary of changes which overly narrow its focus. Assessment easily can drive curriculum; it is important to choose the assessment which influences programming that educates individuals for meaningful living.

Attachment 1

Sources of Interviews

Interviewees

January 14, 1999
Program Visit
Jane Brehm
McHenry County College
Crystal Lake, Illinois

January 25, 1999
Program Visit and Meeting
Sue Barauski
The Center-Resources for Education
DesPlaines, Illinois

February 3, 1999
Meeting
Evalina Cicci
Kishwaukee Valley College
Malta, Illinois

February 15, 1999
Meeting
Ginger Knapp
Susan Van Weelden
McHenry County College
Crystal Lake, Illinois

February 16, 1999
Phone Interview
Mary Willoughby
Colorado Department of Education
Boulder, Colorado

February 16, 1999
Phone Interview
Daphne Greenberg
Center for the Study of Adult Literacy
Georgia State University

February 16, 1999
Phone Inverview
Colleen Clark
South Carolina Department of Education

February 18, 1999
Meeting
Brian Bell
TABE Representative
Crystal Lake, Illinois

February 22, 1999
Meeting-Palatine, Illinois
Pat Mulcrone
Adult Educational Development
William Rainey Harper College
Palatine, Illinois

March 2, 1999
Phone Interview
Suzanne Knell
Center for Study of Adult Literacy
Champaign, Illinois

March 8, 1999
Phone Interview

Tom Applegate
Executive Dean of Workforce Education
Austin Community College
Austin, Texas

March 31, 1999
Meeting-Crystal Lake, Illinois
Jack Reese
Work Keys Representative
Midwest Region Office

April 6, 1999
Meeting-DeKalb, Illinois
Robert Mason
Department of Adult Continuing Education
Northern Illinois University
DeKalb, Illinois

April 6, 1999
Meeting-DeKalb, Illinois
Joyce Onstott
J.M. Onstott and Associates
Aurora, Illinois

April 6, 1999
Meeting-DeKalb, Illinois
Richard Orem
Department of Adult and Continuing Education
Northern Illinois University
DeKalb, Illinois

April 6, 1999

Meeting-DeKalb, Illinois
Sue Perez
Tolton Adult Education Center
Chicago, Illinois

April 6, 1999
Meeting-DeKalb, Illinois
Mary Switzer
Kishwaukee College
Malta, Illinois

April 15, 1999
Phone Interview
Karen Pannell
Work Keys Representative
Southeast Region

May 28, 1999
Meeting-Hoffman Estates, Illinois
Rob Foshay-Corporate Vice-President
PLATO

June 1, 1999
Meeting-Little Rock, Arkansas
John Alderson
Business and Industrial Training
East Arkansas Community College
Forrest City, Arkansas

June 1, 1999
Meeting-Little Rock, Arkansas
Julie Hyland

PLATO
Education Consultant

June 1, 1999
Meeting-Little Rock, Arkansas
Steve Lease
Government Relations
Westark College
Fort Smith, Arkansas

June 1, 1999
Meeting-Little Rock, Arkansas
Dana Murphy
Single Parent/Homemaker Program
Garland Community College
Hot Springs National Park, Arkansas

June 1, 1999
Meeting-Little Rock, Arkansas
Steve Sparks
Workforce Development Center
Southeast Arkansas Tech
Pine Bluff, Arkansas

June 1, 1999
Meeting-Little Rock, Arkansas
Robbie Woodruff
Project Coordinator
Southeast Arkansas College
Pine Bluff, Arkansas

June 7, 1999
Phone Interview
Donna Swedin
PLATO Representative
Midwest Region

July 13, 1999
Meeting -Iowa City, IA
ACT, Inc.
Don Carstensen, Vice President for Educational Services
Michael McClenic, Vice President for Workforce Development

Attachment 2

Eight Assessment Areas of Work Keys

Assessments

Work Keys assessments are scored on a set of established skill scales to provide an accurate, systematic way to measure a worker's abilities. The scales measure a range of skills that end at the point where specialized training is needed.

A brief description of the assessments, their formats, and administration times are provided below. The assessments can be used singly or in any combination.

Applied Mathematics
(paper, 45 minutes)

Measures skill in applying mathematical reasoning to work-related problems, using the methods of calculation that actually occur in the workplace.

Applied Technology
(paper, 45 minutes)

Measures skill in solving problems of a technological nature. The content covers the basic principles of mechanics, electricity, fluid dynamics, and thermodynamics as they apply to machines and equipment in the workplace.

Listening
(audio, 40 minutes)

Measures skill in listening to and understanding work-related messages. Examinees listen to audiotaped messages from individuals in various workplace settings and then write messages based on what they have heard.

Locating Information
(paper, 45 minutes)

Measures skill in using information presented in workplace graphics such as diagrams, floor plans, tables, forms, graphs, charts, and instrument gauges. Examinees are asked to locate, insert, compare, and summarize information in one or more related graphics.

Observation
(video, 60 minutes, administered in two sessions)

Measures skill in noticing details and in paying attention to instructions and demonstrations. The videotaped scenarios and questions are related to the actual demands of the workplace relative to processes, safety procedures, and quality control standards.

Reading for Information
(paper, 45 minutes)

Measures skill in reading and understanding work-related instructions and policies. The reading passages and questions are based on actual workplace demands and include memos, bulletins, notices, letters, policy manuals, and governmental regulations.

Teamwork
(video, 80 minutes, administered in two sessions)

Measures skill in choosing behaviors and/or actions that simultaneously support team relationships and lead toward the accomplishment of work tasks. The videotaped presentations show teams facing challenges in increasingly complex workplace situations. Examinees must recognize the goals of the team and identify ways to accomplish those goals.

Writing
(audio, 40 minutes)

Measures skill in writing work-related messages. Examinees are asked to listen to audiotaped messages from customers, co-workers, or suppliers and then compose written messages based on what they have heard.

* * * * * *

Work Keys assessments are scored on a set of skill scales that provide an accurate, systematic way to measure a person's abilities. The scales measure a range of skills ending at the point where specialized training is needed. Some of the assessments are administered using printed test booklets; others use audiotaped or videotaped presentations that more accurately represent the workplace environment. Scannable answer sheets are used to score all of the assessments except **Listening** and **Writing**. The assessments are developed in accordance with the content validity standards described in the EEOC's *Uniform Guidelines.*

By providing individuals with reliable information regarding their own workplace skill levels and the skill levels required by jobs, Work Keys empowers individuals to make informed career decisions. By providing employers with **common skill scales** for evaluating both the jobs they need to staff and people who want to work, Work Keys facilitates fair and useful hiring strategies.

By providing a **common language** for individuals, educators, and employers, Work Keys helps create links between the worlds of business and education. This enables educators and trainers to communicate with individuals and employers, and to focus instructional materials and programs on meeting their mutual needs.

Attachment 3

Work Keys Job Profiles

Center for Governmental Studies, Northern Illinois University

Below is a sample page from the Occupational Profiles Handbook. The handbook contains profiles for more than 750 different occupations. The relative importance of a particular skill will vary between jobs, and as the chart indicates, not all jobs will entail all eight skill areas. The skills profiled in each job represent those skills most critical to success in that particular job.

Title / DOT Number/Holland Type/Job Family				AM	AT	L	LI	OB	RI	TW	W
HOTEL CLERK				5	4	3	4	3	5	3	3
			Range	5 5	4 4	3 3	4 4	3 3	5 5	3 3	3 3
238.367-038	C	C	Number of Jobs	1	1	1	1	1	1	1	1
HYDRAULIC REPAIRER				5	6	5	5		5	3	4
			Range	5 5	6 6	5 5	5 5		5 5	3 3	4 4
638.281-034	R	L	Number of Jobs	1	1	1	1	0	1	1	1
ILLUSTRATOR				5	4	5	5		5	5	4
			Range	5 5	4 4	4 5	4 5		4 6	4 6	4 4
141.061-022	A	Q	Number of Jobs	2	2	2	2	0	2	2	2
INDUSTRIAL ENGINEER				7	4	3	6	5	6	5	4
			Range	6 7	4 4	3 3	5 6	5 5	6 6	4 5	4 4
012.167-030	I	M	Number of Jobs	2	1	2	2	1	2	2	2
INDUSTRIAL ENGINEERING TECHNICIAN				5		5	6		5	6	3
			Range	5 5		5 5	6 6		5 5	6 6	3 3
012.267-010	I	M	Number of Jobs	1	0	1	1	0	1	1	1
INDUSTRIAL-TRUCK OPERATOR				4	3	4	4	3	4	4	3
			Range	3 5	3 4	3 5	3 4	3 3	4 5	3 6	2 4
921.683-050	R	G	Number of Jobs	7	4	5	7	1	7	6	4
INJECTION-MOLDING-MACHINE OPERATOR				4		4	4		5	3	3
			Range	4 4		4 4	4 4		5 5	3 3	3 3
556.382-014	R	L	Number of Jobs	1	0	1	1	0	1	1	1
INJECTION-MOLDING-MACHINE TENDER				4	4	4	4	6	4	3	3
			Range	3 5	3 6	3 5	3 5	5 6	3 5	3 5	2 3
556.685-038	R	L	Number of Jobs	9	7	6	9	2	9	9	7
INKER				6	4	5	4		5	5	5
			Range	6 6	4 4	5 5	4 4		5 5	5 5	5 5
659.667-010	R	I	Number of Jobs	1	1	1	1	0	1	1	1

Attachment 4

Work Keys Job Profiling Process

established through the occupational profiling procedure, can be used as guides when setting instructional standards or developing curricula designed to help individuals meet the skill requirements of occupations. Examinees will also be able to use this information to compare the skill levels they demonstrate on the Work Keys assessments to the skill levels needed for various occupations.

It is important to note that the occupational profiles are for information and guidance purposes only. They should not be used as selection criteria for a specific job in a specific company. For selection purposes it is necessary to complete a job profile.

Work Keys profiling must be conducted only by ACT-authorized analysts. The backgrounds of these individuals include experience in job analysis or needs analysis, experience as a group facilitator, and familiarity with computers. Some knowledge of EEOC/ADA guidelines is also desirable.

The Seven Key Steps of the Work Keys Job Profiling Process

ACT-Authorized Job Analyst

1

Tours the company, reviews relevant job material provided by company representative(s), and compiles a comprehensive list of tasks associated with the job.

Subject Matter Experts, guided by the ACT-Authorized Job Analyst

2

Review and amend the list for relevance to the job.

3

Rate the importance of the tasks to the job.

4

Rate the relative time spent performing the tasks compared to the other tasks.

5

Identify the tasks most critical to job performance based on the two ratings.

6

Identify the critical tasks requiring each Work Keys skill. (Each skill is discussed separately.)

7

Determine the level of each Work Keys skill needed to be successful on the job. (Each skill is discussed separately.)

Attachment 5

Work Keys Reports

WORKKEYS

Reporting Package

The Work Keys® assessments are designed to measure individuals' proficiency with respect to the skills covered in each criterion-referenced assessment. The standard reporting package consists of several different types of skill reports, however the Work Keys Service Centers using Express Score do not produce aggregate reports.

Individual Reports: Two copies of these reports are printed for each examinee.

✓ **Memo to the examinee:** This report indicates the examinee's skill level for each assessment administered, along with descriptions of the tasks associated with each particular skill level achieved, and some strategies the individual may use to improve her or his skills.

✓ **Data sheet:** This report is a single page containing the examinee's scores along with demographic and other information the examinee provided during assessment.

✓ **Resume page:** This report is a brief summary of the examinee's skill level for each assessment administered. The format of this section makes it suitable for the examinee to copy and attach to school-admission or job applications.

Aggregate Reports: Two copies of each report are provided per client order.

✓ **Roster Reports:** This report contains several lines of information for each examinee. The information includes examinees' assessment scores, demographic data, and job-related data. A code list is provided to help clients interpret this condensed summary.

✓ **Chart Essay Reports:** Up to ten separately titled subreports can be generated as summaries for each assessment administered. Most of the subreports present scores by a demographic category (such as gender or grade level). Subreports are only generated for categories that include five or more examinees.

✓ **Vocational Information Reports:** At the test administration, examinees are asked to select from a given list one job they are most interested in and to indicate the job they currently have. This report presents the percentage of examinees indicating interest in particular jobs and employed in particular jobs. The number and percentage of examinees seeking employment or wanting help in obtaining a job are also included.

✓ **Local Item Reports:** Local items are provided by the client and might include questions about the quality of training or instruction at that site, or about experience related to a particular test (e.g., familiarity with using calculators). This report indicates the number and percentage of examinees choosing each option for each local item.

Individual Skill Reports

- document the examinee's skill level for each assessment taken
- describe tasks associated with each skill level
- suggest general strategies for improvement
- include demographic and other information provided by the examinee
- provide a summary suitable for including with job and school applications
- are useful to individuals and counselors

Chart Essay Reports

- compare scores of groups of examinees in table and graph form
- compare scores of various groups
- present changes in learners of one grade level and other sub-groups
- are useful to counselors, teachers, and trainers

Roster Reports

- contain assessment score(s), demographic data, and career choice information for each examinee
- are included with each client order
- are useful to counselors, teachers, and trainers

Vocational Information Reports

- compile information provided by examinees
- show percentages of examinees interested in or currently holding particular jobs
- include number and percentage of examinees looking for jobs or wanting help with finding a job
- are included with each client order
- are useful to teachers and counselors

Local Items Reports

- allow up to 20 local items
- contain a summary of answers to local questions submitted by clients
- are provided to each client opting for this service

Attachment 6

Sample Work Keys Report for a Participant

WORKKEYS™ Official Skill Report

ACT

0000-111111-2222222

Skill Report for: FIRST LASTNAME

Test Site: EAST HIGH SCHOOL
Test Date: MARCH, 1995

Your Work Keys skill report can help you understand how you did on the test(s), and how you can do better. The first part tells you about your skills and gives information on how you can improve them. The Data Sheet gives you a record of the information you gave when you took the test(s). You can use your Work Keys Summary, the last page of this report, in job or school applications.

READING FOR INFORMATION (Levels range from 3 to 7) Level: 6

You scored at Level 6. People achieving this level can understand reading materials containing difficult concepts, complicated procedures, and/or a great deal of detail about a topic, such as excerpts from straightforward regulatory and legal documents, and rental agreements. To improve your skills:

* read densely detailed materials that contain jargon and technical terms whose definitions you must determine from the contexts of materials.
* generalize from what you have read and apply your generalization to new situations.
* analyze complex policies and procedures to identify the underlying reasons for them.

APPLIED MATHEMATICS (Levels range from 3 to 7) Level: 4

You scored at Level 4. People who score at this level can set up and solve problems involving two or more different mathematical operations (addition, subtraction, multiplication, or division) on several whole numbers, fractions, decimals, or percentages. To improve your skills:

* determine what information, calculations, and unit conversions are needed to solve the problem by examining the entire problem carefully; then estimate your answer.
* set up and solve problems that involve multiple-step calculations on a mixture of whole numbers, fractions, decimals, or percentages.
* perform operations on fractions with both like and unlike denominators, and calculate perimeter and area of basic shapes.
* practice converting between English and metric systems, adding hours and minutes, and calculating percent discounts or markups.
* check to be sure that you solved the problem that was posed and that your answer is reasonable.

LISTENING (Levels range from 1 to 5) Level: 2

You scored at Level 2. People who score at this level can write down the basic ideas of the messages correctly. They give a fair amount of useful information, but they may leave out or note incorrectly some of the important information from the messages. To improve your skills:

* check to be sure that you have included all of the important information in the message, such as the name, telephone number, and address, correctly.

WORKKEYS™ Official Skill Report

ACT

0000-111111-2222223

Data Sheet

Name:	LAST, FIRST M.	SSN/ID:	555555555
Address:	POBOXOOO		
City:	OUR TOWN	Test Date:	MARCH, 1995
State:	USA		
Zip:	99999	Test Site:	EAST HIGH SCHOOL

TEST ADMINISTERED	LEVEL SCORE	ADMINISTRATION CONDITITIONS
READING FOR INFORMATION	6	
APPLIED MATHEMATICS	4	
LISTENING	2	
WRITING	2	
LOCATING INFORMATION	4	
APPLIED TECHNOLOGY	4	

This is what you reported about yourself at the time of the Work Keys testing.

Date of birth: 03/19/77 Gender: MALE
Race/Ethnicity: AFRICAN-AMERICAN/BLACK
You communicate best in English: YES

Our record shows that you signed the Work Keys release form.

Highest level of education: 12TH GRADE
Program of study: GENERAL Educational status: ENROLLED PART-TIME

Number of semesters completed in each of the following:

English/Language Arts:	4	Health Sciences/Occupations:	0
Math:	4	Home Economics Education:	2
Science:	4	Marketing Education:	0
Social Sciences:	4	Technology Education:	0
Fine Arts:	0	Office Management/Technology	0
Physical Education:	0	Trade and Industrial Education:	0
Agricultural Education:	0	Other Vocational/Technical Education:	1
Business Education:	1		

Other education/training: TECHNICAL PREP.

Hours worked/week: ZERO Years worked at/least half-time: NONE
Looking for a full-time job: YES Looking for a part-time job: YES
Willing to move to accept a job: YES

Current job:
Future job choice: Electrician
Certainty of this choice: VERY SURE

You want help with:

Deciding on what type of job you want:	NO	Preparing for a job interview:	YES
Learning what jobs are available:	NO	Getting more job training:	YES
Learning how to apply for a job:	YES	Getting some work experience:	YES

The information above was taken from the answer document you completed as part of your Work Keys testing. If you have any questions about your Work Keys scores, please contact the ACT Program Services, 2201 North Dodge Street, P. O. Box 168, Iowa City, IA 52243.

0000-111111-2222222

Work Keys
Summary

Skill Report for: FIRST M. LAST

Test Site: EAST HIGH SCHOOL
Test Date: MARCH, 1995

READING FOR INFORMATION (Levels range from 3 to 7) Level: 6

This person scored at Level 6. Individuals with Level 6 skills can understand reading materials with a substantial amount of detail about a topic, such as excerpts from straightforward regulatory and legal documents, a memo outlining procedures to be followed in the case of injuries, or a rental agreement. They can correctly apply complex instructions from such reading materials.

APPLIED MATHEMATICS (Levels range from 3 to 7) Level: 4

This person scored at Level 4. Individuals with Level 4 skills can set up and solve problems involving two or more different mathematical operations (addition, subtraction, multiplication, or division) on whole numbers, fractions, decimals, or percentages.

LISTENING (Levels range from 1 to 5) Level: 2

This person scored at Level 2. Individuals with Level 2 skills can correctly write down the basic ideas of a spoken message, giving a fair amount of useful information, but may miss some of the important details or incorrectly record some of the information.

WRITING (Levels range from 1 to 5) Level: 2

This person scored at Level 2. Individuals with Level 2 skills can write messages that are generally understandable. Many errors in grammar, punctuation, and/or sentence structure make understanding these messages somewhat difficult.

LOCATING INFORMATION (L evels range from 3 to 6) Level: 4

This person scored at Level 4. Individuals with Level 4 skills can correctly use straightforward workplace graphics, such as basic order forms, line graphs, standard tables, and basic diagrams, to find several related pieces of information, compare trends and main points, and/or summarize information within a single graphic or across more than one graphic representing related information.

APPLIED TECHNOLOGY (Levels range from 3 to 6) Level: 4

This person scored at Level 4. Individuals with Level 4 skills can correctly apply elementary physical principles (e.g., heat transfer, the flow of fluids through pipes) to solve problems involving one moderately complex system or more than one uncomplicated system.

We hope you find this Work Keys skill information useful. If you have questions about these scores or about the Work Keys system or skills, please contact Work Keys (96), ACT Program Services, 2201 North Dodge Street, P. O. Box 168, Iowa City, IA 52243.

BEST COPY AVAILABLE

ACT WORKKEYS™ Official Skill Report

0000-111111-2222223

Examinee Score Roster — EAST HIGH SCHOOL — MARCH, 1995

CONTACT PERSON

(Note: please see the Score Interpretation Guide for the coded information on this report)

NAME	SSN/ID	SEX	RACE	EDUC LEVEL	PROGRAM	ENG LANG	HOURS WORKED/ WEEK	WANTS HELP IN 123 456
LAST, FIRST	111111111	Male	Black L	12TH 2	Coll.Prep	Y W 3	NONE	YYY YYY
SCORES: RI 6 LI 5	AM 5 AT Below Level 3							
DESIRED JOB: Other Medical Specialties & Technolog			FAIRLY SURE	CURRENT JOB:				
LOOKING FOR: FULL-/PART-TIME JOB; WILLING TO MOVE				SUBJECTS: 4 4 4 4 0 1 0 0 1 0 0 0 0 1				
GENERAL LOCAL ITEMS:								
LAST, FIRST	222222222	Male	Black L	12TH 1	Voc/Tech	Y W 2	NONE	N*N YYY
SCORES: RI 6 LI 3	AM 4 AT 3							
DESIRED JOB: Electrician			VERY SURE	CURRENT JOB:				
LOOKING FOR: PART-TIME JOB; WILLING TO MOVE				SUBJECTS: 4 4 4 1 1 0 0 0 1 0 0 0 2				
GENERAL LOCAL ITEMS:								
LAST, FIRST	333333333	Male	Black L	12TH 2	Other	Y W 3	NONE	NYN NYY
SCORES: RI 5 LI 4	AM 4 AT Below Level 3							
DESIRED JOB: Air Conditioner/Heat Mechanic			FAIRLY SURE	CURRENT JOB:				
LOOKING FOR: FULL-/PART-TIME JOB; WILLING TO MOVE				SUBJECTS: 4 4 4 4 2 2 0 0 0 2 0 1 0 0 0				
GENERAL LOCAL ITEMS:								
LAST, FIRST	444444444	Male	Black L	12TH 1	General	Y W 0	NONE	NYY YYY
SCORES: RI 4 LI Below Level 3	AM 4 AT Below Level 3							
DESIRED JOB: Artist (Painter)			VERY SURE	CURRENT JOB:				
LOOKING FOR: FULL-TIME JOB; WILLING TO MOVE				SUBJECTS: 4 4 4 4 0 1 0 0 0 2 0 0 0 0 0				
GENERAL LOCAL ITEMS:								
LAST, FIRST	555555555	Male	Black L	12TH 2	General	Y W 2	NONE	NNY YYY
SCORES: RI 5 LI 4	AM 4 AT 4							
DESIRED JOB: Electrician			VERY SURE	CURRENT JOB:				
LOOKING FOR: FULL-/PART-TIME JOB; WILLING TO MOVE				SUBJECTS: 4 4 4 4 0 0 0 1 0 2 0 0 0 0 1				
GENERAL LOCAL ITEMS:								

0000-111111

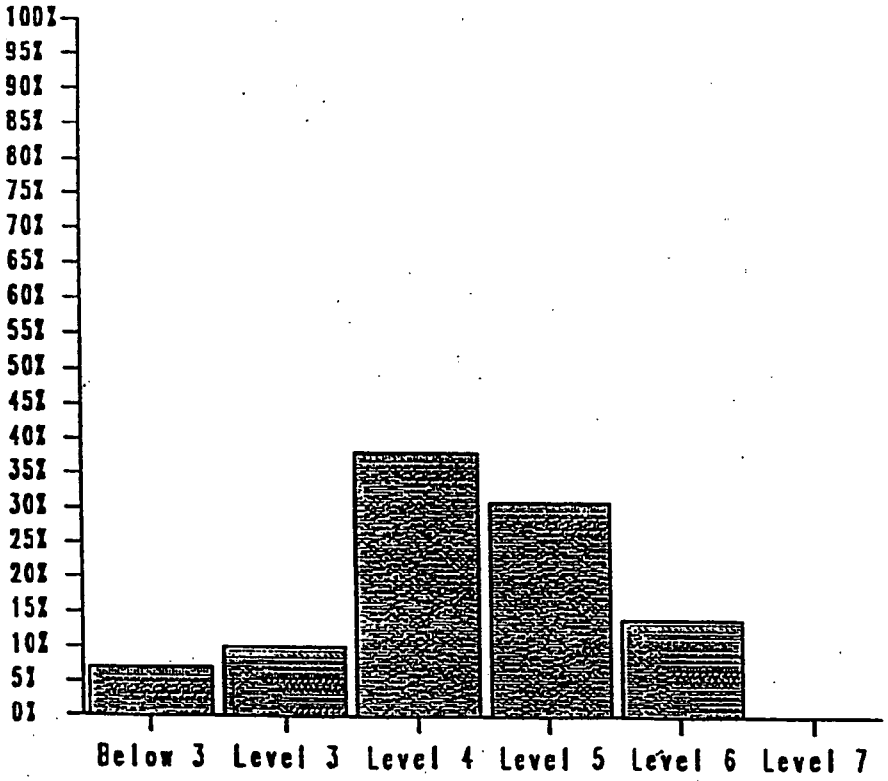
MARCH, 1995

WORKKEYS™ Official Skill Report

ACT

Work Keys Scores
Number (Percentage) of Examinees who took the Reading for Information Assessment
EAST HIGH SCHOOL

	Below 3	Level 3	Level 4	Level 5	Level 6	Level 7	TOTAL
Total	2 (7%)	3 (10%)	11 (38%)	9 (31%)	4 (14%)	(0%)	29 (100%)



The information presented here includes only individual scores obtained under standard administration conditions.

WORKKEYS™ Official Skill Report

ACT

0000-111111-2222223

Number and Percent of Examinees Wanting Various Jobs:
Based on Self-Reported Information From
The Work Keys Assessments
MARCH, 1995 EAST HIGH SCHOOL

Number	Pct.	Code	Job Title
1	3%	709	Other Marketing & Sales
1	3%		Marketing & Sales
2	7%	733	Accountant
2	7%		Financial Transactions
1	3%	762	Truck Driver
1	3%		Vehicle Operation & Repair
2	7%	771	Electrician
1	3%	776	Carpenter
3	10%		Construction & Maintenance
1	3%	803	Computer Repairer
1	3%	805	Air Conditioner/Heat Mechanic
2	7%		Home/Business Equipment Repair
2	7%	821	Engineering Technician
1	3%	829	Other Engineering & Related Technologies
3	10%		Engineering & Related Technologies
2	7%	839	Other Medical Specialties & Technologies
2	7%		Medical Specialties & Technologies
1	3%	841	Horticulturist
1	3%		Natural Sciences & Mathematics*
1	3%	862	Artist (Painter)

Attachment 7

Work Keys Service Centers

Work Keys Service Centers

Licensed Work Keys Service Centers provide unique and special access to Work Keys system products and services and are designed to serve a wide variety of clients and purposes.

Work Keys Service Centers are playing a major part in the development of a more highly skilled workforce. Licensed by ACT, the service centers provide local access to all the services of the Work Keys system and thereby strengthen the connections between individuals, employers, and educators. Associated with technical and community colleges, vocational and adult education centers, career counseling centers, schools, and state and local governmental agencies, the service centers provide individuals and employers with direct access to Work Keys job profiling (job analysis), instructional support, assessments, and reporting services.

Licensed service centers provide unique and special access to Work Keys system products and services and are designed to serve a wide variety of clients and purposes. As an ACT-licensed service center, an organization or institution is authorized to administer the Work Keys assessments on demand and to use the Work Keys Express Score software for 60-minute scoring and immediate reporting of the multiple choice assessment results.

By developing continuing relationships with local employers, by helping educators and trainers meet the mutual needs of learners and employers, by offering job analysis services and developing a database of job profiles for local jobs, the service centers offer opportunities for growth and success to the licensed organization and its clients.

Nature of the Work Keys Service Center

Licensed educational institutions (including technical or community colleges, adult education centers, vocational or technical schools, and governmental agencies) that provide instruction in one or more of the Work Keys skills, service centers offer a wide range of Work Keys programs and services, including job profiling services, assessments, standard and Express scoring, and instruction. Career counseling, job placement, job matching, or other services may also be available.

Service centers may have additional satellite sites. The satellite sites offer Work Keys services under the authority of the service center. In such instances, service centers provide all administrative functions for the satellite locations while instructional and job analysis services may be offered on a

shared basis. For example, several sites may share the services of an instructor or ACT-authorized job profiler. To be considered satellite sites, the additional sites must be covered under the same contract as the master service center. ACT bills the master service center for services provided to all the sites although Work Keys materials may be shipped directly to and from both the master service center and its satellite sites.

Opportunities for the Work Keys Service Center

The concept of the Work Keys Service Center is one that incorporates the idea of *value-added* service: Work Keys services and products provide a framework upon which the service centers may build. The Work Keys system creates opportunities for the service centers. The success and growth of individual service centers depend substantially upon how they package and deliver assessment, job analysis, guidance, consulting, and instructional services.

The universe of potential Work Keys clients and their needs, is vast and varied:

> **Employers** may have jobs profiled to determine the skills and skill levels required for those jobs. A service center may contract with local companies to provide skill-building training to incumbent employees or to provide assessment, training, or assistance in locating and selecting appropriately skilled workers.
>
> **Individuals** may choose to be assessed at their convenience to determine and document their skill levels in the Work Keys skills. Once an individual has taken the assessments, the service center may offer career counseling and guidance, and assistance with job searches, training, or referral.
>
> **Educators** may direct students to the service center for assessment and appropriate training, or they may turn to the service center for information or guidance when developing their curriculum.

Benefits to the Service Center

Upon becoming a Work Keys Service Center, the licensed organization will receive the following benefits.

- The service center may store Work Keys system assessments for on-demand administration. Since Work Keys maintains a secure assessment program, only Work Keys Service Centers can meet the demands of those who wish to assess on a fairly frequent basis and those who need immediate assessment results. Other agencies that administer the Work Keys assessments are limited both in the type of clientele they may assess (e.g., schools may assess only their own students) and in their access to the assessments (e.g., they must place advance orders with ACT each time they wish to give the assessments).

- The service center is licensed to use Work Keys Express Score software which

provides for nearly immediate (within 60 minutes) scoring of the multiple-choice Work Keys assessments. Other agencies have access only to the standard scoring services with a normal turnaround of ten days or less, or to the 24-hour service via overnight mail or fax transmittal, at additional cost..

- The service center can offer clients additional services that are built upon the Work Keys assessment information. These may include instruction, career counseling, and consultation.

- The service center may establish its own charges to clients for programs and services offered in connection with the Work Keys system except as specified in the license agreement.

Applying for a Work Keys Service Center License

To request an application for a Work Keys Service Center license, please contact your local ACT representative (see inside back cover) or call Work Keys Client Services at 1-800-WORK KEY (967-5539).

Once applicants have been approved, they will receive information about how to take the next steps necessary for implementing Work Keys related services. We look forward to adding to our rapidly expanding network of workforce development service providers, and working with them to give America's workforce the competitive edge it needs in today's global economy.

Attachment 8

Costs Associated with Work Keys

Service Center (stocking tests and running assessments on site).

The per test cost includes scoring and reporting. The client (student) gets 2 copies of their personal report and the testing agency gets 2 copies of an aggregate report of those tested. For a slight additional charge this can be made available on disk if the agency wishes to upload it all to an electronic base. Service centers usually charge an additional fee for providing assessment services which can provide additional revenue. Results can be reported within 24 hours with a service center on the property. Otherwise, results will be provided within 10 business days. An institution does not have to be a service center to administer Work Keys. In that case tests would be ordered from Iowa City or service center. Scoring would be done there as well. If tests are ordered from other sites they must be administered and returned for scoring within 12 days.

Illinois currently has 5 service centers in the state: John A. Logan Community College in Carterville, Richland Community College in Decater, Waubonsee Community College in Sugar Grove, Danville Area College in Danville, and South Suburban Community College in South Holland.

First Year: $4,000.00

Each Year Following: $2,500.00

Satellites

With affiliation, each service center can support 4 satellites. These have the same capacity to stock and score assessments.

First Year: $400.00

Each Year Following: $275.00

Job Profiling--Each service center must have a certified job profiler on staff.

$3,250 initial charge (4 weeks pre-training and 1 week of hands-on training and e-mail hook-up)

$1,400 yearly license fee

Work Keys has profiled 2,572 jobs. A local job profiler would assess jobs specific to the community. This is often used as a revenue generator for institutions. Arkansas provides an initial cost-free evaluation for a company and has found this works as an incentive for future involvement with the program.

Supplemental funding for these additional charges is carried out through a variety of state agencies. In Arkansas the Department of Human Services, Employment Security Department, TEA Services (Transitional Educational Assistance Project--local agencies), Economic Development Districts and the WAGE program support this initiative. Individual companies pay for individual job profiling.

McHenry County College utilizes grants for assessments and individual company funding for job profiling.

EDUCATIONAL INSTITUTION MATERIALS ORDER FORM

Effective 9/1/98

Work Keys orders should be received at ACT **at least two weeks** prior to your scheduled test date. Materials will be shipped without charge via UPS (or comparable method) to arrive approximately one week prior to your scheduled test date. You will be assessed actual shipping charges if your order requires **RUSH** or **EXPRESS** shipping methods. **Institutions pay for the return of the materials.** Fees for Work Keys assessments are assessed at the time of scoring, based on the number of assessments scored.

All assessment materials (with the exception of purchased Administration Videos) must be returned to ACT immediately following administration of the Work Keys assessments. The ordering authority who signs this order is responsible for the security of the Work Keys assessment materials from receipt until return to ACT.

Request assessments booklets based on the number of examinees expected to complete each assessment. Request audio and video tapes based on the number of testing rooms you expect to use at any one time. Administration instructions suggest that video- and audio-based assessments be administered in groups of 20-25 examinees. One audio and/or video tape will be provided based on these guidelines.

In addition to the Base (A) Form which has always been available, an Alternate (B) Form is also available for *Reading for Information, Applied Mathematics, Locating Information* and *Listening and Writing*. To order the Base Form, write the quantity in Column A; to order the Alternate Form, write the quantity in Column B. You may order the Base Form, the Alternate Form, or both.

Special accommodation formats are available for all Work Keys assessments. Contact Work Keys Customer Services for specifics on what is available.

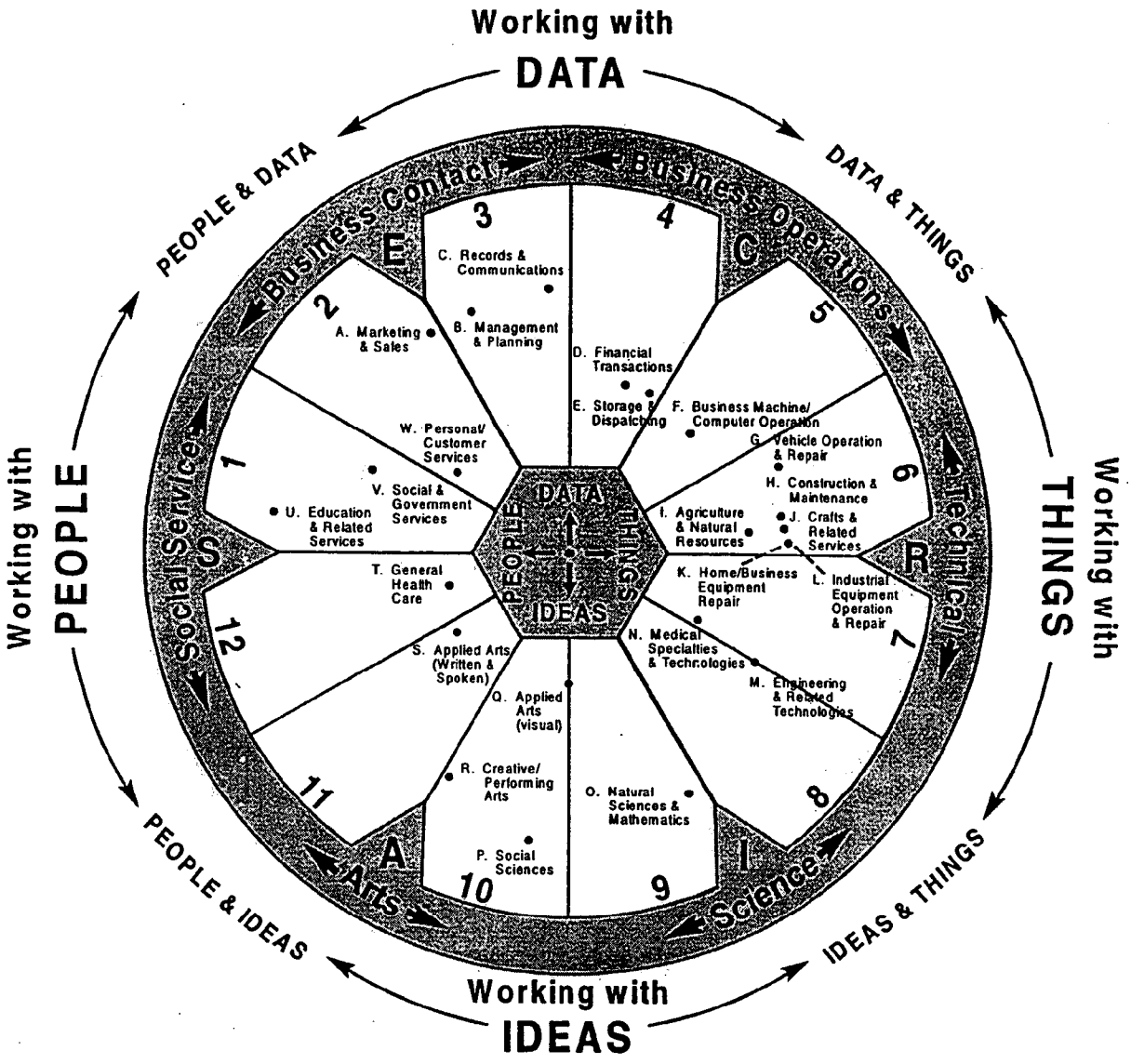
Assessment Name (Length)	Fee (at time of scoring)	Quantity A	Quantity B
Reading for Information (45 minutes) A (041 079 980) B (041 095 980)	$3.20 per assessment Booklet format; Multiple-choice		
Applied Mathematics (45 minutes) A (041 075 980) B (041 005 980)			
Applied Technology (45 minutes) A (041 043 950)			
Locating Information (45 minutes) A (041 087 980) B (041 031 980)			
Teamwork (Part 1--40 minutes) (Part 2--40 minutes) A (041 090 000)	$6.00 per assessment Video tape format; Multiple-choice		
Observation (Part 1--30 minutes) (Part 2--30 minutes) A (041 151 000)			
Listening and Writing (if administering BOTH assessments) (40 minutes) A (041 074 000) B (041 107 000)	$16.00 per set Audio tape format; Constructed response		
Listening only (40 minutes) A (041 074 000) B (041 107 000)	$13.50 per assessment Audio tape format; Constructed response		
Writing only (40 minutes) A (041 074 000) B (041 107 000)	$12.50 per assessment Audio tape format; Constructed response		

BEST COPY AVAILABLE

Attachment 9

ACT's World-of-Work Map

THE WORLD-OF-WORK MAP
ACT's Model, 2nd Edition



About the Map

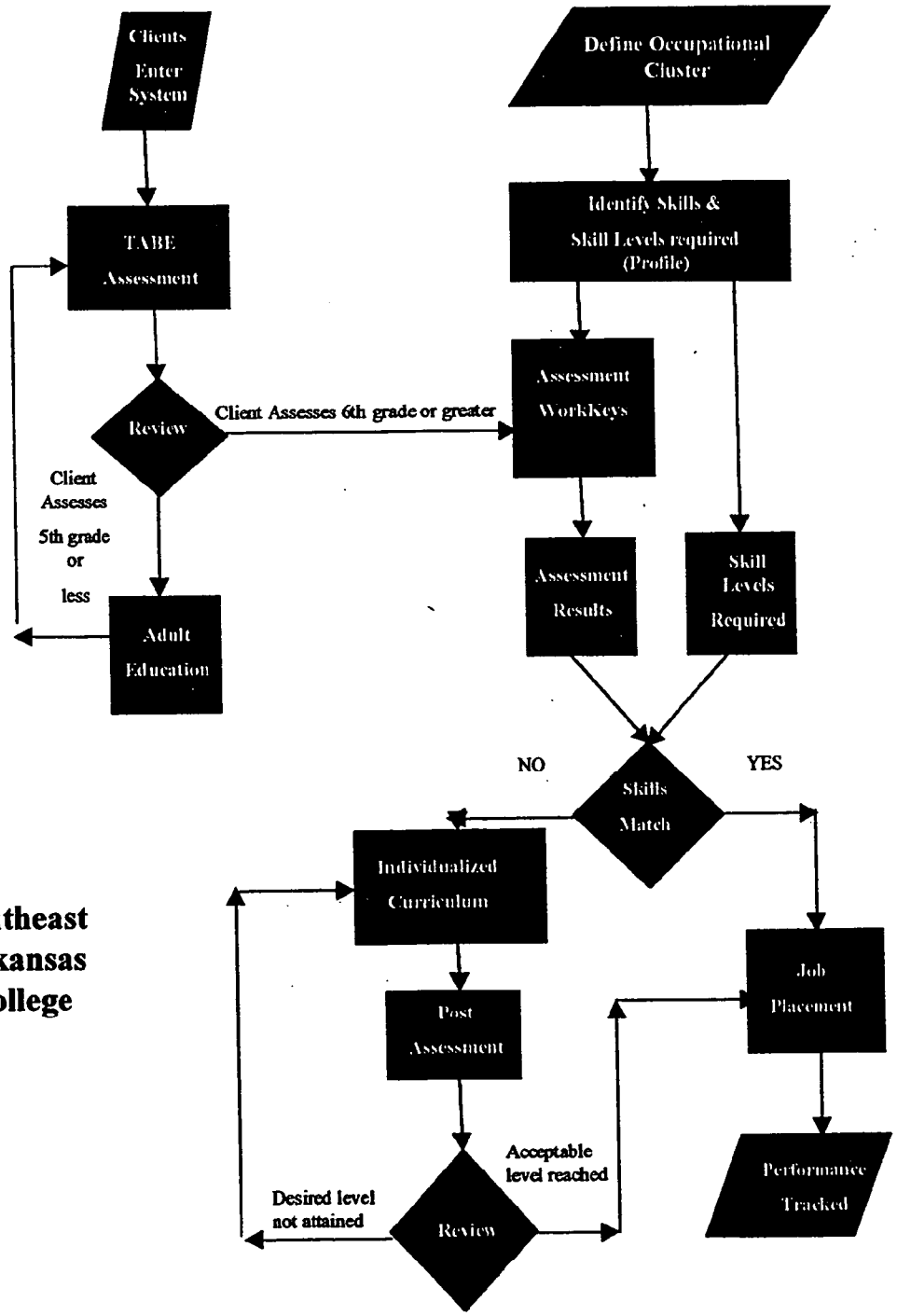
- The World-of-Work Map arranges career families (groups of similar jobs) into 12 regions. Together, the career families cover all U.S. jobs. Although the jobs within a family differ in their locations on the map, most are located near the point shown.
- A career family's location is based on its primary work tasks—working with DATA, IDEAS, PEOPLE, and THINGS.
- Six general areas of the work world and related Holland types (Holland et al., 1969) are indicated around the edge of the map.

BEST COPY AVAILABLE

Attachment 10

Arkansas' Model for Work Keys Implementation

Workplace Readiness Client Process Flow



Southeast Arkansas College

U.S. Department of Education

Educational Resources Information Center (ERIC)

Reproduction Release Form

For each document submitted, ERIC is required to obtain a signed reproduction release form indicating whether or not ERIC may reproduce the document. A copy of the release form appears below or you may obtain a form from the Clearinghouse. Please mail two copies of your document with a completed release form to:

ERIC Clearinghouse on Adult, Career, and Vocational Education

Acquisitions Coordinator

1900 Kenny Road

Columbus, OH 43210-1090

If you have any questions about submitting documents to ERIC, please call 1-800-848-4815, ext 47642 or e-mail <chambers.2@osu.edu>.

ERIC REPRODUCTION RELEASE FORM

I. Document Identification

Title: Pre-G.E.D. Assessment and Certification in Illinois: Final Report and Recommendations

Author(s): Patricia Inman and Charles E. Trott

Date of Publication: Oct. 5, 1999

II. Reproduction Release

A. Timely and significant materials of interest to the educational community are announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE). Documents are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document. If reproduction release is granted, one of the following notices is affixed to the document.

Level 1

"PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY:

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 2A

"PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY HAS BEEN GRANTED BY:

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 2B

"PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY:

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Note: The above lines do **NOT** have to be signed by the person submitting the document. A signature is required below to place the document in the database if it is accepted.

B. If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign the release.

✓ Permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy **(Level 1)**.

Permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only **(Level 2A)**.

Permitting reproduction and dissemination in microfiche only**(Level 2B)**.

Documents will be processed as indicated provided quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at **Level 1**.

C. "I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated. Reproduction from the ERIC microfiche or electronic media by persons other that ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for nonprofit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquires."

Name: Patricia L. Inman

Signature: Patricia L. Inman

Organization: Northern Illinois University - Center for Governmental Studies

Position: Research Associate

Address: Northern Illinois University Center for Governmental Studies

Zip Code: DeKalb, IL 60115

Telephone No: (815) 753-0939

Fax (815) 753-2305

E-mail: pinman@niu.edu

Date:

III. Document Availability Information

(Non-ERIC Source)

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price Per Copy:

Quantity Price:

IV. Referral to Copyright/Reproduction Rights Holder

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

Zip Code:

(9/97)